

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

What is claimed as the invention is:

- 1.-20.     *(Canceled)*
21. *(New)*   A method for assessing the differentiation of a population of human embryonic stem cells, comprising measuring podocalyxin-like protein (PODXL) expression level in the population of human embryonic stem cells; wherein a decrease in that PODXL expression level relative to the PODXL expression level in the population measured at an earlier time point indicates that the population is differentiating.
22. *(New)*   The method of claim 21, wherein the PODXL expression level is measured at the mRNA level.
23. *(New)*   The method of claim 22, wherein the PODXL expression level is measured at the mRNA level by PCR amplification.
24. *(New)*   The method of claim 21, wherein the PODXL expression level is measured at the protein level.
25. *(New)*   The method of claim 24, wherein the PODXL expression level is measured at the protein level by antibody assay.
26. *(New)*   The method of claim 21, wherein the PODXL expression level is measured using flow cytometry.